TEST RESULTS OF GRADATION FOR GSB
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 20-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286.7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	18-05-23
Type of Mix	:	GSB (Granular Sub Base)
Date of Test	:	18-05-23
Oven Dry Weight	:	10000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec. Limit Vide Table 400.1 MORTH Specification
75	0	0	0	100	100
53	995	995	9.95	90.05	80-100
26.5	1687	2682	26.82	73.18	55-90
9.5	1292	3974	39.74	60.26	35-65
4.75	1491	5465	54.65	45.35	25-55
2.36	1766	7231	72.31	27.69	20-40
0.425	1663	8894	88.94	11.06	10-25
0.075	1106	10000	100.00	0.00	0-5

TESTS ON FILLER SCREEN MATERIALS

Sl no	Particulars	Test results	Spec.Limit Vide Table
1	Liquid Limit, %	21.33%	Maximum 25
2	Plasticity index, %	Non plastic	Maximum 6

* The results obtained are satisfactory as per standard requirements.

Note:-

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TEST RESULTS OF GRADATION FOR WMM

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 24-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-05-23
Type of Mix	:	WMM (Wet Mix Macadam)
Date of Test	:	21-05-23
Oven Dry Weight	:	11000 Grams

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	% Cumulative Weight Retained	% Passing	Spec.I.Vide Table 400.13 MORTH Specification
53	0	0	0.0	100.0	100
45	313	313	2.8	97.2	95-100
22.4	2255	2568	23.3	76.7	60-80
11.2	2182	4750	43.2	56.8	40-60
4.75	2250	7000	63.6	36.4	25-40
2.36	1623	8623	78.4	21.6	15-30
0.6	627	9250	84.1	15.9	8-22
0.075	1334	10584	96.2	3.8	0-5

* The results obtained are satisfactory as per standard requirements.

Note:-

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TEST REPORT OF AGGEGRATE IMPACT VALUE
IS: 2386 Part IV

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 24-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-05-23
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	:	21-05-23

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	300.2	300.2
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	73.9	74.0
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	225.9	225.8
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.4	0.4
5	Aggregate impact value	(B/A)*100	24.6	24.7
6	Aggregate impact value (Mean of two tests)	Pecentage	24.6	

* The results obtained are satisfactory as per standard requirements.

Note:-

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DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE(IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 24-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	21-05-23
Type of Mix	:	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	:	21-05-23

Result:

Index	Percentage of Flakiness and Elongation Index	Secified limits as per MORTH specification table 400-12
Flakiness Index	12.9%	Combined Flakiness & Elongation Index for WMM is Maximum 35%
Elongation Index	12.6%	
Combined Flakiness and Elongation Index for WMM	25.5%	

* The results obtained are satisfactory as per standard requirements.

Note:-

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TEST REPORT ON BITUMEN

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 27-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer's Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	25-05-23
Sample Type	:	Bitumen
Reference to BIS codes	:	IS: 1201-2021, IS: 1202-1220(1978) (Reaffirmed-2019)
Date of Test	:	25-05-23

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	62	Min 45mm
2	Softening Point, °C	51.6	Min. 47°C
3	Ductility, cm	97	Min. 40cm
4	Flash point, °C	292	Min. 220°C
	Fire point, °C	304	

* The results obtained are satisfactory as per standard requirements.

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TEST RESULTS OF GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 31-05-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	29-05-23
Type of Mix	:	DBM-Plant (Dense Bituminous Macadam)
Date of Test	:	29-05-23
Weight of Sample	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10 (grading -2)
37.5	0	0	0	100	100
26.5	250	250	5.00	95.00	90-100
19	350	600	12.00	88.00	71-95
13.2	450	1050	21.00	79.00	56-80
4.75	1750	2800	56.00	44.00	38-54
2.36	400	3200	64.00	36.00	28-42
0.3	1350	4550	91.00	9.00	7-21
0.075	250	4800	96.00	4.00	2-8
PAN	200	5000	0.00	0	0

* The results obtained are satisfactory as per standard requirements.

Note:-
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PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR DENSE BITUMINOUS MACADAM

Lab ID	:	**CP-RW-2023-06-13-09**	**Date: 01-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.	
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.	
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.	
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064	
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23	
Source of Sample	:	Sample supplied by Agency	
Sample Condition	:	Satisfactory	
Date of Receipt	:	29-05-23	
Type of Mix	:	DBM (Dense Bituminous Macadam)	
Date of Test	:	29-05-23	

Table 500-6 : Physical Requirements fo Coarse Aggregate for Dense Bituminous Macadam

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	10.0	Combined Flakiness & Elongation Index for DBM is Maximum 35%	IS:2386 Part I
	Elongation Index	14.0		
Strength	Aggregate Impact Value	18.0	Maximum 30%	IS:2386 Part IV
Specific gravity	Specific gravity	2.58	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.38	Maximum 2%	IS:2386 Part III

* The results obtained are satisfactory as per standard requirements.

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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 01-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	29-05-23
Type of Mix	:	DBM (Dense Bituminous Mecadam)
Date of Test	:	29-05-23

The results of the tests conducted on the Dense Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.29	11.82	9KN(Min)
2	Marshal flow at 60°C, mm	3.54	3.87	2-4
3	Percent air Voids	4.56	4.17	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.54	14.76	13-15
5	Percent Voids filled with Bitumen(VFB %)	68.98	70.28	65-75
6	Density, g/cc	2.42	2.40	–

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 01-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	29-05-23
Type of Mix	:	DBM(Dense Bitumnous Macadam)
Date of Test	:	29-05-23

Type of Binder	:	60/70
% of Binder Used	:	4.5%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	9.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.0	2.0	98.2	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

* The results obtained are satisfactory as per standard requirements.

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TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR DBM
(IS 2386:(Part 1) 1963 (RA2011)

Date: 10-06-23

Lab ID	:	**CP-RW-2023-06-13-09**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Date of Receipt	:	09-06-23
Type of Mix	:	DBM (Dense Bituminous Macadam)
Date of Test	:	09-06-23

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	W1	500	500
2	Weight of the sample After extraction	W2	479.5	479
3	Initial weight of Paper	W3	4	4
4	Final weight of Paper	W4	6	6
5	Increase in weight of Filter Paper	W5=W4-W3	2	2
6	Bitumen percentage	$\frac{W1-W2+W5}{W1} \times 100$	4.5	4.60
7	Average percentage	%	4.55	

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Lab ID : CP-RW-2023-06-13-09 Date: 10-06-23

AFTER EXTRACTION(Trail-1)

Weight of Sample(gm) : 479.5

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	0	0	0.0	100.0	90-100
19	50	50	10.4	89.6	71-95
13.2	55	105	21.9	78.1	56-80
4.75	180	285	59.4	40.6	38-54
2.36	40	325	67.8	32.2	28-42
0.3	75	400	83.4	16.6	7-21
0.075	60	460	95.9	4.1	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 479

IS Sieve Size(mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0.0	100.0	100
26.5	0	0	0.0	100.0	90-100
19	49	49	10.2	89.8	71-95
13.2	75	124	25.9	74.1	56-80
4.75	110	234	48.9	51.1	38-54
2.36	75	309	64.5	35.5	28-42
0.3	90	399	83.3	16.7	7-21
0.075	55	454	94.8	5.2	2-8

* The results obtained are satisfactory as per standard requirements.

Note:-

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TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 05-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	03-06-23
Type of Mix	:	BC-Plant (Bituminous Concrete)
Date of Test	:	03-06-23
Oven Dry Weight	:	5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	89	89	1.8	98.2	90-100
9.5	705	794	15.9	84.1	70-88
4.75	893	1687	33.7	66.3	53-71
2.36	587	2274	45.5	54.5	42-58
1.18	496	2770	55.4	44.6	34-48
0.6	500	3270	65.4	34.6	26-38
0.3	525	3795	75.9	24.1	18-28
0.15	451	4246	84.9	15.1	12-20
0.075	355	4601	92.0	8.0	4-10
PAN	399	5000	100	0.0	0

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Quality Manager

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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 06-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	03-06-23
Type of Mix	:	BC(Bitumenous Concrete)
Date of Test	:	03-06-23

Type of Binder	:	60/70
% of Binder Used	:	5.4%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.8 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	98.5	1.5	98.3	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

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M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

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PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 06-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	03-06-23
Type of Mix	:	BC (Bituminous Concrete)
Date of Test	:	03-06-23

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
Partical Shape	Flakiness Index	12.4	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	11.8		
Strength	Aggregate Impact Value	22.1	Maximum 24%	IS:2386 Part IV
Specific gravity	Specific gravity	2.68	Maximum 2.7	IS:2386 Part III
Water Absorption	Water Absorption	0.21	Maximum 2%	IS:2386 Part III

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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 06-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Source of Sample	:	Hot Mix Plant, Bangalore
Sample Condition	:	Satisfactory
Date of Receipt	:	03-06-23
Type of Mix	:	BC (Bituminous Concrete)
Date of Test	:	03-06-23

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.14	11.13	10KN(min)
2	Marshal flow at 60°C, mm	3.52	3.51	2-4
3	Percent air Voids	4.82	4.83	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.28	14.26	13-15
5	Percent Voids filled with Bitumen(VFB %)	71.87	71.63	65-75
6	Density, g/cc	2.25	2.26	–

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TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : CP-RW-2023-06-13-09 **Date: 12-06-23**

Customer : Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.

Address : Byatarayanapura Sub Division, BBMP, Bangalore.

Project Name : Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.

Agency : M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064

Customer Reference : BBMP/EE/BTP/WO/194/2022-23

Source of Sample : Sample supplied by Agency

Date of Receipt : 11-06-23

Type of Mix : BC (Bituminous Concrete)

Date of Test : 11-06-23

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	W1	500	500
2	Weight of the sample After extraction	W2	475	474.5
3	Initial weight of Paper	W3	4	4
4	Final weight of Paper	W4	6	6
5	Increase in weight of Filter Paper	W5=W4-W3	2	2
6	Bitumen percentage	$\frac{W1-W2+W5}{W1} \times 100$	5.40	5.50
7	Average percentage	%	5.45	

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Lab ID : CP-RW-2023-06-13-09 Date: 12-06-23

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 475

IS Sieve Size (mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	5	5	1.1	98.9	90-100
9.5	65	70	14.7	85.3	70-88
4.75	120	190	40.0	60.0	53-71
2.36	77	267	56.2	43.8	42-58
1.18	29	296	62.3	37.7	34-48
0.6	12	308	64.8	35.2	26-38
0.3	48	356	74.9	25.1	18-28
0.15	49	405	85.3	14.7	12-20
0.075	56	461	97.1	2.9	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 474.5

IS Sieve Size (mm)	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	7	7	1.5	98.5	90-100
9.5	66	73	15.4	84.6	70-88
4.75	115	188	39.6	60.4	53-71
2.36	75	263	55.4	44.6	42-58
1.18	30	293	61.7	38.3	34-48
0.6	13	306	64.5	35.5	26-38
0.3	48	354	74.6	25.4	18-28
0.15	50	404	85.1	14.9	12-20
0.075	49	453	95.5	4.5	4-10

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DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID	:	**CP-RW-2023-06-13-09** **Date: 12-06-23**
Customer	:	Assistant Executive Engineer, Byatarayanapura Sub Division, BBMP, Bangalore.
Address	:	Byatarayanapura Sub Division, BBMP, Bangalore.
Project Name	:	Improvements to Roads and drain at Kogilu and Kogilu Layout in Ward No.06 Kogilu.
Agency	:	M/S. K R CONSTRUCTIONS, PROP. C MAHESH, NO:286,7th B CROSS, JAKKUR, LAYOUT, BANGALORE-560064
Customer Reference	:	BBMP/EE/BTP/WO/194/2022-23
Sample Condition	:	Satisfactory
Date of Receipt	:	11-06-23
Type of Mix	:	Tack coat
Date of Test	:	11-06-23

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
2	Area of Plate (a)	Sq.mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.803	0.77
5	Weight of tack Coat (d=c-b)	Kg	0.023	0.022
6	Rate of spread of tack coat	Kg/sq.m	0.256	0.244
7	Average	Kg/sq.m	0.250	
8	Specified Limit	Kg/sq.m	0.250 Kg/sq.m	

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